ABSTRACT

A power steering pump comprises a housing that includes a bore, a fluid discharge port that supplies pumped fluid into the bore, and a fluid bypass port for recycling excess fluid to the pumping elements. The pump outlet is at one end of the bore. A flow control valve is slideably received in the bore and regulate the size of the inlet to the fluid bypass port. The pump includes a solenoid assembly that has a plunger that is operatively connected to the flow control valve through the second end of the bore opposite the pump outlet. By adjusting the magnitude of the current to the electromagnetic coil of the solenoid assembly, the position of the flow control valve is varied to increase or decrease fluid flow to the fluid bypass port and thereby regulate the output from the pump.